## **Listing of Claims**

- 1. (Currently Amended) An apparatus for restricting movement of a patient's head, the apparatus comprising: a frame; and a plurality of constraints engaged with the frame to constrain the patient's head relative to the frame, wherein the plurality of constraints includes a first constraint including an axis oriented generally radial to the patient's head, the first constraint configured to permit at least four degrees of motion of the patient's head relative to the frame, a first degree of motion of the at least four degrees of motion generally permitting motion transverse to the axis of the first constraint.
- 2. (Original) The apparatus of claim 1, wherein the plurality of constraints exactly constrain the patient's head relative to the frame.
- 3. (Original) The apparatus of claim 1, wherein the first constraint permits exactly five degrees of motion.
- 4. (Original) The apparatus of claim 2, wherein the first constraint permits exactly five degrees of motion.
- 5. (Original) The apparatus of claim 1, further comprising: a support structure that supports the frame, the support structure including a vest that is configured to be worn by the patient.
- 6. (Original) The apparatus of claim 2, further comprising: a support structure that supports the frame, the support structure including a vest that is configured to be worn by the patient.
- 7. (Original) The apparatus of claim 3, further comprising: a support structure that supports the frame, the support structure including a vest that is configured to be worn by the patient.
- 8. (Original) The apparatus of claim 4, further comprising: a support structure that supports the frame, the support structure including a vest that is configured to be worn by the patient.
- 9. (Original) The apparatus of claim 3, wherein the plurality of constraints exactly constrain the patient's head relative to the frame.

- 10. (Original) The apparatus of claim 5, wherein the plurality of constraints exactly constrain the patient's head relative to the frame.
- 11. (Original) The apparatus of claim 7, wherein the plurality of constraints exactly constrain the patient's head relative to the frame.
- 12. (New) The apparatus of claim 1, wherein the first constraint permits five degrees of motion of the patient's head relative to the frame including a second degree of motion of the five degrees of motion generally permitting a linear motion parallel to the axis of the first constraint.
- 13. (New) The apparatus of claim 12, further comprising:
- a base member movably coupled to the frame to permit motion generally parallel to the axis of the first constraint; and
- a head constraint member configured to engage the head, the head constraint member being moveably coupled to the base member to permit motion generally transverse to the axis of the first constraint.
- 14. (New) The apparatus of claim 13, wherein the first constraint further includes a sleeve coupled to the frame, the sleeve having an interior for receiving the base member.
- 15. (New) The apparatus of claim 14, wherein one of the sleeve and the base member includes a keyway to receive a key on the other of the sleeve and the base member.
- 16. (New) The apparatus of claim 1, wherein the first degree of motion is generally a linear motion transverse to the axis of the first constraint.
- 17. (New) The apparatus of claim 16, wherein the linear motion is generally perpendicular to the axis of the first constraint.
- 18. (New) The apparatus of claim 17, wherein the first constraint permits exactly four degrees of motion of the patient's head relative to the frame.